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EXAMINER
NGUYEN, CINDY

ART UNIT	PAPER NUMBER
2161	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/900,079	VANDERSLUIS, KIRSTAN ANDERSON
	Examiner	Art Unit	
	Cindy Nguyen	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _26 March 2007_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-29_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-29_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

In view of the appeal brief filed on 03/26/07, PROSECUTION IS HEREBY

REOPENED. The options set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office

action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no

new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Regarding claims 7, 8, 9, 10, 11 and 12, the terms "Determining for each element

of the static extensible markup language template if a datum needs to be dynamically

generated ..." renders the claim indefinite because it is unclear whether the limitations

following the terms are part of the claimed invention. See MPEP § 2173.05(d). what is

the result if a datum is not dynamically generated.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

Claims 1-12 and 18-29 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter.

Claims 1 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. The claim recites a system and method for

converting data in a first hierarchical data scheme into a second hierarchical data

schema, also the body of the claim merely contains a dynamic data generation module

containing data in the first hierarchical data schema, which can be software modules.

Therefore, the claim is software, program per se and not statutory (computer programs

claimed as computer listing per se, i.e., the descriptions of expressions of the programs,

are not physical "things". They are neither computer components nor statutory

processes, as they are not "acts" being performed.

Claims 18 and 26 recite a method where there is no useful, concrete and tangible

result. The claim recited a method for converting data in a first hierarchical data scheme

into a second hierarchical data schema .The claimed invention lacks a result step which

has practical application in the real world. A practical application is required to be useful,

concrete and tangible. Determining for each element of the static extensible markup

language template if a datum needs to be dynamically generated creating no tangible

result, what is the result if no datum is dynamically generated, no tangible result is

produced by the claimed process.

For it to be a tangible result, it must be more than a thought or a computation and

must have a real world value rather than being an abstract idea.

Claims which are broad enough to read on statutory subject matter or on non-

statutory subject matter are considered non-statutory. Cf. In re Lintner, 458 F.2d 1013,

1015, 173 USPQ 560, 562 (CCPA 1972) ("Claims which are broad enough to read on

obvious subject matter are unpatentable even though they also read on nonobvious

subject matter.") During prosecution, applicant can amend to limit the claims to statutory

subject matter.

The following link on the World Wide Web is for the United States Patent And

Trademark Office (USPTO) policy on 35 U.S.C. §101.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelinesl01_20051026.

pdf>

Claims 2-12, 19-25 and 27-29, fully incorporating the deficiencies of their respective

independent claim, are likewise rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

Claims 1-3, 5-11, 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated

by Fernandez et al. (US 6604100) (hereafter Fernandez).

Regarding claim 1, Fernandez discloses: A system for converting data in a first

hierarchical data scheme into a second hierarchical data scheme, comprising (see the abstract,

Fernandez):

a template defining the second hierarchical data scheme, wherein a hierarchical data

schema is a scheme that groups data and its context (i.e., XML construction part, e.g., an XML

template, col. 5, line 29, Fernandez)

a dynamic data generation module (106, fig. 1) contained in the template (i.e., XML

template in fig. 1, i.e., the XML generator module 106, merges the tuple streams with the XML

construction part, col. 5, lines 42-45, Fernandez); and a data source (110, fig. 1), in

communication with the dynamic data generation module, containing data in the first

hierarchical data scheme (relational database 110, fig. 1, Fernandez).

Regarding claim 2, all the limitations of this claim have been noted in the rejection of

claim 1. In addition, Fernandez discloses: wherein the template and the dynamic data generation

module are contained in a server (server 110, fig. 1, Fernandez).

Regarding claim 3, all the limitations of this claim have been noted in the rejection of

claim 2. In addition, Fernandez discloses: further including a driver connected between the

dynamic data generation module and the data source (i.e., the translator 104 takes a source

description, which is an XML document specifying systems information needed to contact the

source: the protocol JDBC the connection string and source specific query driver, col. 9, lines 66

to col. 10, line 4, Fernandez).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of

claim 1. In addition, Fernandez discloses: wherein the template is a static extensible markup

language document (col. 5, lines 43-44, Fernandez).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of

claim 1 above. In addition, Fernandez discloses: wherein the template is an extensible markup

language document type definition (col. 4, lines 1-25 , Fernandez).

Regarding claim 7, all the limitations of this claim have been noted in the rejection of

claim 1. In addition, Fernandez discloses: wherein the template is an extensible markup language

schema (XML template, col. 5, line 29, Fernandez).

Regarding claims 8 and 9, all the limitations of these claims have been noted in the

rejection of claim 1 above. In addition, Fernandez/Bellwood discloses: wherein the first and the

second hierarchical data scheme are selected from the group of: extensible markup language

schemes, relational databases, non-relational databases, extensible markup language databases

and self-describing databases (see abstract, Fernandez).

Regarding claim 10, all the limitations of this claim have been noted in the rejection of

claim 1 above. In addition, Fernandez/Bellwood discloses: wherein the dynamic data generation

module includes a query directed to the data source (i..e, the query composer module 102, col. 5,

lines 18-25, Fernandez).

Regarding claim 11, all the limitations of this claim have been noted in the rejection of

claim 1. In addition, Fernandez/Bellwood discloses: wherein the dynamic data generation

module includes a data mapping between the first hierarchical data scheme and the second

hierarchical data scheme (i.e., mapping relation databases to XML views, col. 2, lines 42-51,

Fernandez).

Regarding claim 13, most of the limitations of this claim have been noted in the rejection

of claim 1. In addition, Fernandez discloses: a) publishing a dynamic template in a server (col. 4,

lines 65 to col. 5, lines 8, Fernandez);

b) receiving an instruction from a client at the dynamic template (i.e., applications

provide user queries in XML-QL, a query language specifically designed for XM, XML_QL

queries contain a where clause followed by a construct clause, col. 8, lines 37-67, Fernandez);

c) executing the dynamic template (i.e., the query composer module 102 (executable)

takes a user query and the RXL view query and generates a new RXL query , col. 9, lines 15-35,

Fernandez); and

d) when a dynamic data generation module is executed, performing a data transfer

operation that converts data in the first hierarchical data scheme into the second hierarchical data

scheme (i.e., the translator 104 takes an RXL query and decomposes it into one or more SQL

queries and an XML template, the SQL queries are executed by the RDBMS 110, server or

engine and their flat results are converted into XML by the XML generator 106, col. 9, lines 60-

65, Fernandez).

Regarding claim 14, all the limitations of this claim have been noted in the rejection of

claim 13. In addition, Fernandez discloses: wherein step (a) further includes the steps of:

al) receiving a template (i.e., querying relational data in the XML, col.3, lines 10-12,

Fernandez);

a2) determining for each element of the template if dynamically generated data is required (i.e., in XML an attribute with type ID contains a value that uniquely identifies the element in the document, i.e., a key.. In RXL the distinguished attribute ID always has type ID and its value is skolem term, which is used to control grouping and element creation, col. 6, lines 48-52, Fernandez);

a3) when the dynamically generated data is required, receiving a data source for obtaining the dynamically generated data (generate XML data with complex structure and with arbitrary levels of nesting... transformations from the relational store to the XML view, col. 3, lines 30-35, Fernandez).

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 13. In addition, Fernandez discloses: further including the steps of:

a4) receiving a data mapping between the first hierarchical data scheme and the second hierarchical data scheme (col. 2, lines 44-47 , Fernandez).

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 15. In addition, Fernandez discloses: when the first hierarchical data schema is a non-extensible markup language (relational database 110) and the second hierarchical data schema is a second non-extensible markup language (i.e., relational schema, col. 7, lines 55 to col. 8, lines 16, Fernandez) creating a first data mapping between the first hierarchical data schema and an intermediate extensible markup schema (col. 10, lines 7-20); ii) creating a second data mapping between the intermediate extensible markup schema and the second hierarchical data schema (col. 10, lines 7-20).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of

claim 15. In addition, Fernandez discloses: further including the step of" a5) receiving a key

associated with the data mapping (col. 10, lines 2-27, Fernandez).

1.   *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosesd or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

2.   Claims 4, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Fernandez et al. (US 6581062) (Fernandez) in view of Prompt et al. (US 6985905) (hereafter

Prompt).

Regarding claim 4, all the limitations of this claim have been noted in the rejection of

claim 3. However, Fernandez didn't disclose: further including a developer module contained

in the server for creating the dynamic data generation module. On the other hand, Prompt

discloses: further including a developer module contained in the server for creating the dynamic

data generation module (col. 46, lines 60 to col. 47, lines 6, Prompt). Thus, at the time

invention was made, it would have been obvious to a person of ordinary skill in the art

to include further including a developer module contained in the server for creating the

dynamic data generation module in the system of Fernandez as taught by prompt. The

motivation being to includes mapping relational database objects and logical

relationships to virtual directory entries that are configured to communicatie all respects

of the virtual directory structure over the network to the client application.

Regarding claim 12, all the limitations of this claim have been noted in the rejection of

claim 4. In addition, Fernandez/Prompt discloses: wherein the developer module contains a

wizard that walks a user through a process of creating the dynamic data generation module (col.

46, lines 35-45, Prompt).

Claims 18-23 and 25-29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Fernandez et al. (US 6604100) (hereafter Fernandez) in view of

Krupa (US 20020156811).

Regarding claims 18 and 26, all the limitations of these claims have been noted in the

rejection of claims 14 and 15 above. However, Fernandez didn't disclose: repeating steps. On

the other hand, Krupa discloses: steps (b) through (d) for every element of the static extensible

markup language template to form a dynamic data conversion program (i.e., customer is

repeating , paragraph 0031). Thus, at the time invention was made, it would have been obvious

to a person of ordinary skill in the art to include repeat steps in the system of Fernandez as

taught by Krupa. The motivation being to provide a of forming a relational database, the method

includes mapping a corresponding unique key to each tree component of an XML document and

a possiblility of repeating (paragraph 0014-0015, Krupa).

Regarding claim 19, all the limitations of this claim have been noted in the rejection of claims 6

and 7 above. It is therefore rejected as set forth above.

Regarding claims 20 and 27, all the limitations of these claims have been noted in the

rejection of claims 14 and 15 above, respectively. In addition, Fernandez/Krupa discloses:

wherein step (a) further includes the step of:

al) defining an input parameter (col. 5, line 64 to col. 6, lines 10, Fernandez).

Regarding claim 21, all the limitations of this claim have been noted in the rejection of

claim 18. In addition, Fernandez/Krupa discloses: wherein step (c) further includes the step of:

c l) receiving a driver (col. 5, lines 30-35, Fernandez).

Regarding claim 22, all the limitations of this claim have been noted in the rejection of

claim 18. In addition, Fernandez/Krupa discloses: wherein step (c) further includes the step of:

c l) generating a query to the data source (col. 5, lines 30-35, Fernandez).

Regarding claim 23, all the limitations of this claim have been noted in the rejection of

claim 18. In addition, Fernandez discloses: wherein step (d) further includes the step of:

dl) receiving a screen (XML view) having a list of elements from the data source and a

list of metatags from the static extensible markup language template (col. 5, lines 63 to col. 6,

line 10, Fernandez).

Regarding claim 25, all the limitations of this claim have been noted in the rejection of

claim 18. In addition, Fernandez discloses: further including the steps of:

e) publishing the dynamic data conversion program to a server (col. 5, lines 45-55,

Fernandez);

f) when a query is received at the server for the dynamic data conversion program,

executing the dynamic data conversion program to form an extensible markup language

document (col. 9, lines 61-65, Fernandez).

Regarding claim 28, all the limitations of this claim have been noted in the rejection of

claim 26 above. In addition, Fernandez/Krupa discloses: wherein step (d) further includes the

steps of:

d2) generating a query (102, fig. 1 and corresponding text, Fernandez);

dl) receiving a query type (XML-QL, col. 5, lines 63 to col. 6, lines 10, Fernandez).

Regarding claim 29, all the limitations of this claim have been noted in the rejection of

claim 28. In addition, Fernandez/Krupa discloses: wherein step (dl) further includes receiving an

insert query type (col. 8, lines 39-44, Fernandez).

3.   Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fernandez et

al. (US 6604100) (hereafter Fernandez) in view of Krupa (US 20020156811)) and further in

view of Povilus (U.S 5740425).

Regarding claim 24, all the limitations of this claim have been noted in the rejection of

claim 18 above. However, Fernandez/Prompt didn't disclose: wherein step (c) further includes

the step of: displaying an incomplete version of a dynamic extensible markup language template

wherein a static element is shown in a first color and a dynamic element is shown in a second

color. On the other hand, Povilus discloses: wherein step (c) further includes the step of:

displaying an incomplete version of a dynamic extensible markup language template wherein a

static element is shown in a first color and a dynamic element is shown in a second color (col.

32, lines 45-67, Povilus). Thus, at the time invention was made, it would have been obvious to a

person of ordinary skill in the art to include the steps for displaying an incomplete version of a

dynamic extensible markup language template wherein a static element is shown in a first color

and a dynamic element is shown in a second color in the system of Fernandez/Bellwood as

taught by Povious. The motivation being to enable the users clearly see the different elements in

the templates and easily for mapping information when converting the information between

templates, so it can be easily shared between data sources (col. 32, lines 42-67, Povilus).

4.   *Contact Information*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Cindy Nguyen whose telephone number is 571-272-

4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cindy Nguyen